



INSPIRE

Context and Governance

EC INSPIRE TEAM
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Sustainable Development Policy Context

- Agenda 21, the Rio Declaration on Environment and Development , WSSD Johannesburg 2002
- The Treaty on European Union
- The EU Sustainable Development Strategy
- The **EU 6th Environmental Action Programme**

Four Priorities

1. Climate Change
2. Nature and Biodiversity
3. Environment and Health
4. Natural resources and waste



Seven Thematic Strategies

1. *Clean Air For Europe (CAFE)*
2. *Soil protection*
3. *Sustainable use of pesticides*
4. *Marine environment*
5. *Waste prevention and recycling*
6. *Sustainable use of natural resources*
7. *Urban environment*

- UN - Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters



Climate Change Impacts

- Flooding -

- In the period 1998-2002 floods comprised 43% of all disaster events in Europe
 - 100 major floods
 - 700 dead
 - Half a million displaced people
 - 25 billion Euros uninsured economic loss
- Along the Rhine, 10 m people live in areas liable to extreme flooding, potential damage estimated at 165 bn. Euros
- 101,000 kms of coastline, population doubled in last 50 years. Assets within 500 mt of coast = 500-1000 bn euros.



How to address

- Comprehensive set of policies covering surface and ground water quality, flood assessment, marine and coastal areas, soil, etc.
- Right geographical scale i.e. river basin for water quality and floods
- Sound knowledge based on timely, accurate, easily accessed geospatial and environmental information, shared across European, national, and local jurisdictions.



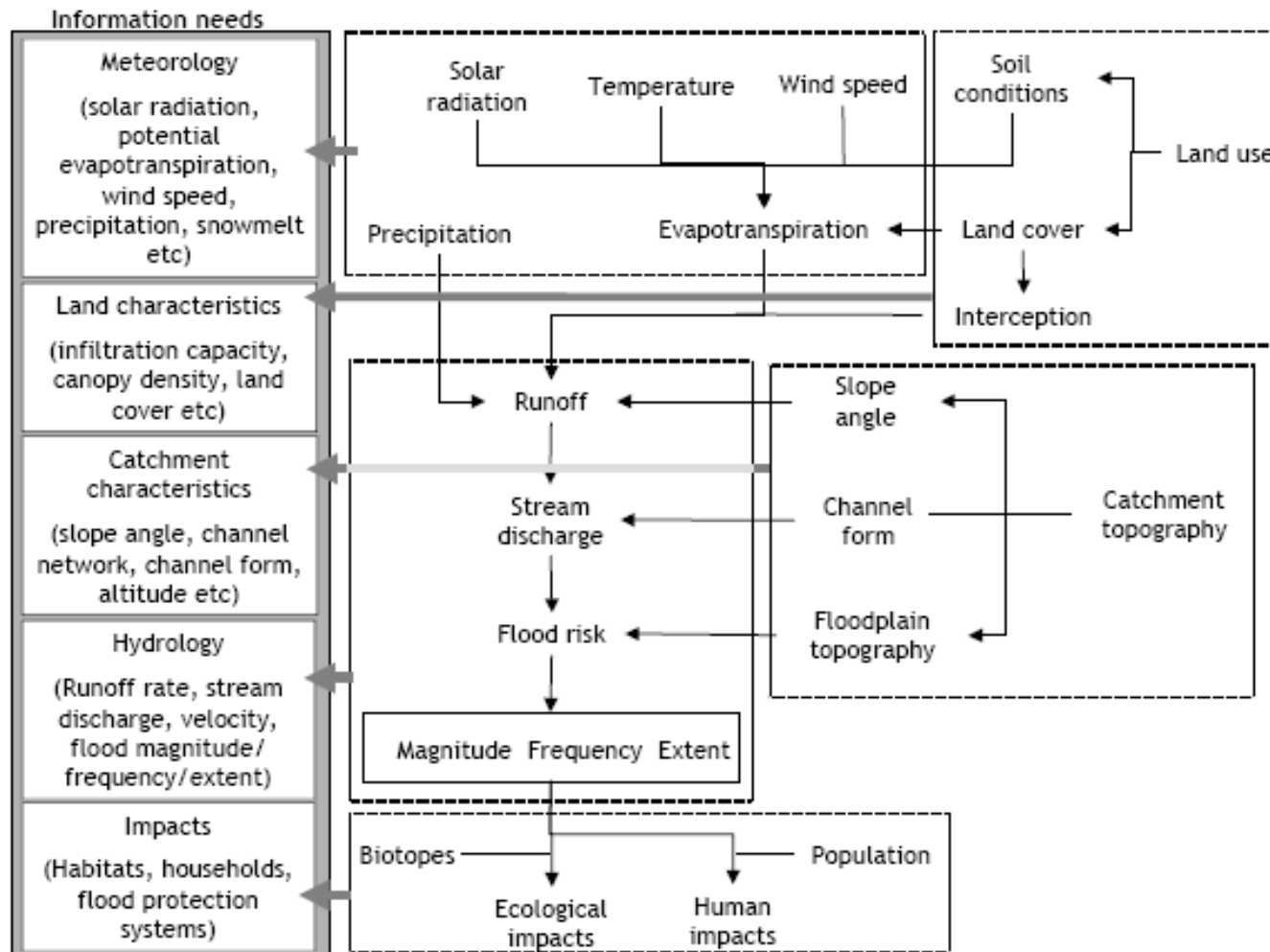
Proposal for a Directive on the Assessment and Management of Floods

In co-decision

- A preliminary flood risk assessment
 - Including art.4 a-f
 - (e) Likelihood of future floods and projected impact of climate change and land use trends
- Prepare flood risk maps by 2013 – with 6 yearly updates
- Flood risk management plans by 2015



Floods Assessment and Management Data & Information Requirements



Source: GMES BICEPS Report



Marine Strategy Directive

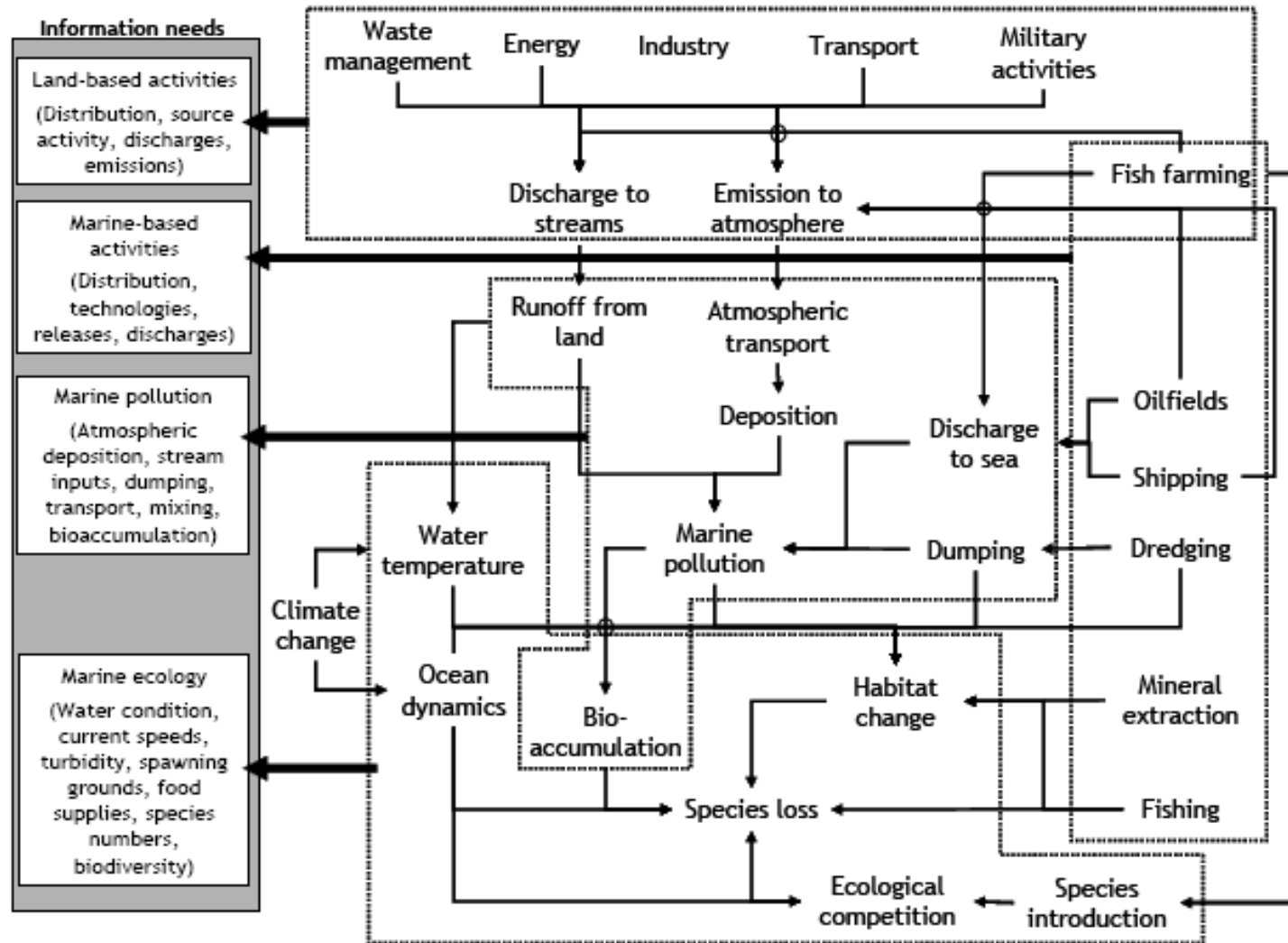
in co-decision

- Monitor and assess environmental status of European Marine waters
- Establish initial assessment
 - Analysis of essential characteristics (habitats, biological components, physio-chemical, hydromorphology)
- Establish and implement co-ordinated monitoring programmes
 - Monitoring programmes consistent within Marine Regions or Sub-Regions
 - Where appropriate EC shall adopted specifications and standardized methods for monitoring and assessment



Marine Strategy Directive

Data and Information Needs?



Source: GMES BICEPS Report



Soils Directive

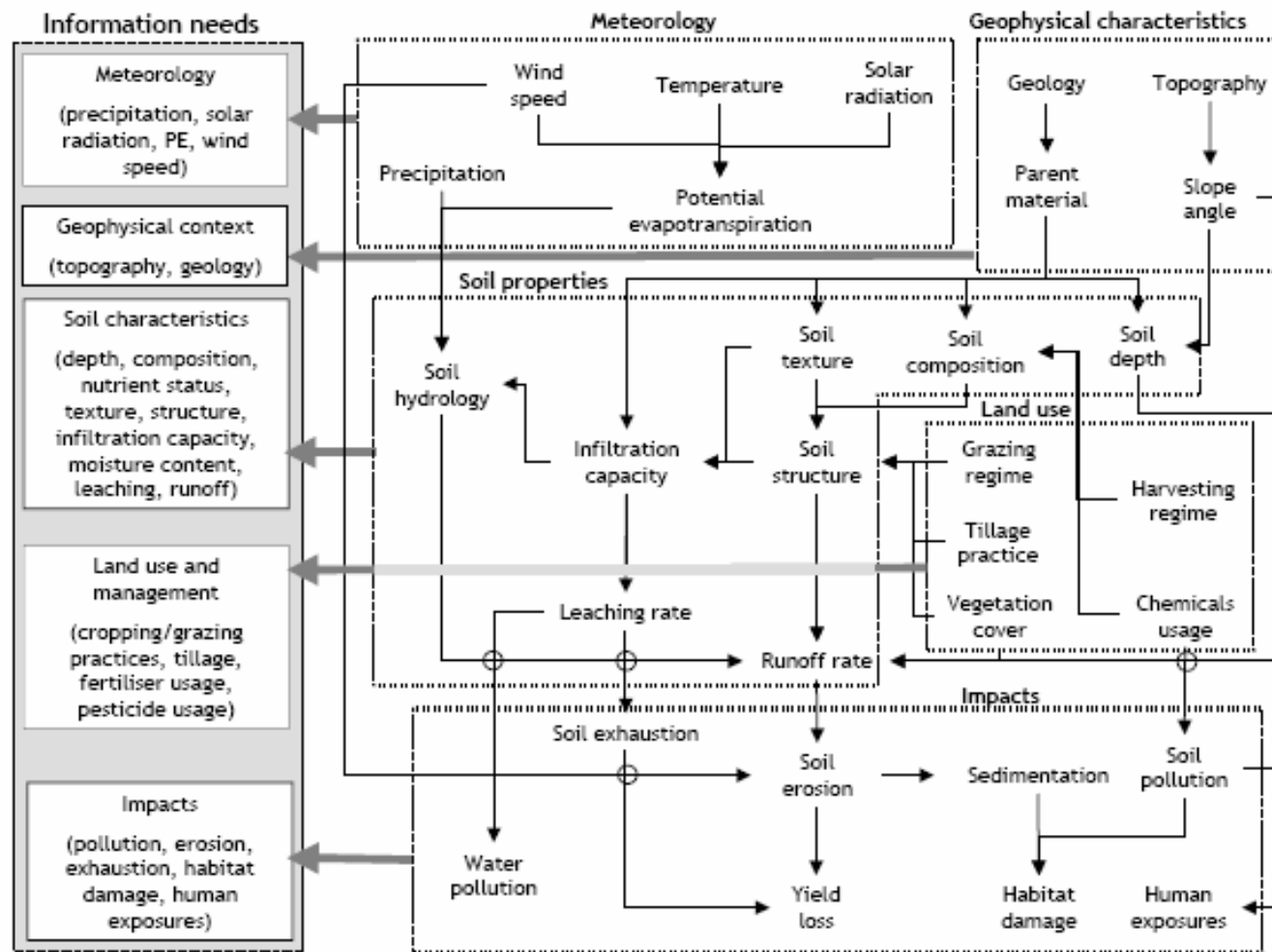
in co-decision

- Risk prevention, mitigation and restoration
 - Identify risk areas for soil degradation
 - Erosion
 - Organic matter decline
 - Compaction and decrease of porosity
 - Salinisation
 - **Landslides**
- Soil contamination
 - Identify contaminated sites – posing a risk to human health or environment



Soils Directive

Data & Information Requirements



Source: GMES BICEPS Report



INSPIRE is needed....

Needs

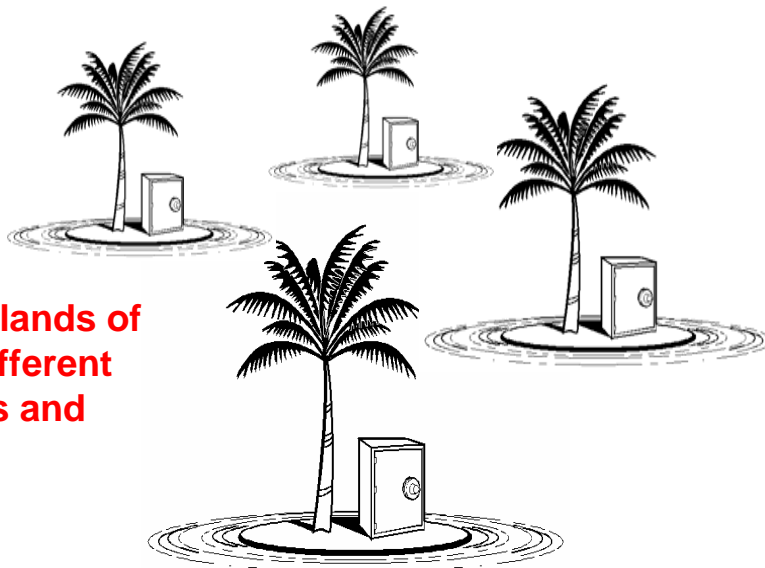
- Better information needed to support policies
- Improvement of existing information flows
- Differentiation across regions to be considered
- Revision of approach to reporting and monitoring, moving to concept of sharing of information

Situation in Europe

- Data policy restrictions
 - pricing, copyright, access rights, licensing policy
- Lack of co-ordination
 - across borders and between levels of government
- Lack of standards
 - incompatible information and information systems
- Existing data not re-usable
 - fragmentation of information, redundancy, inability to integrate



**July 2004 - EC Proposal COM(2004) 516
for a Directive establishing an
infrastructure for spatial information in
the Community – INSPIRE
Political Agreement 21 November 2006
Entry into Force 15 May 2007**



**EU has islands of
data of different
standards and
quality...**



INSPIRE Directive

General Provisions

- INSPIRE lays down **general rules** to establish an infrastructure for spatial information in Europe for the purposes of Community environmental policies and policies or activities which may have an impact on the environment.
 - This infrastructure shall build upon infrastructures for spatial information established and operated by the Member States.
- INSPIRE does not require collection of new spatial data – electronic format
- INSPIRE does not affect Intellectual Property Rights



INSPIRE Scope

- Spatial data held by or on behalf of a public authority operating down to the lowest level of government when laws or regulations require their collection or dissemination
- INSPIRE covers 34 Spatial Data Themes laid down in 3 Annexes – (*required to successfully build environmental information systems*)



INSPIRE Spatial Data Scope (1)

Annex I

1. Coordinate reference systems
2. Geographical grid systems
3. Geographical names
4. Administrative units
5. Addresses
6. Cadastral parcels
7. Transport networks
8. Hydrography
9. Protected sites

Annex II

1. Elevation
2. Land cover
3. Ortho-imagery
4. Geology



INSPIRE Data Scope (2)

Annex III

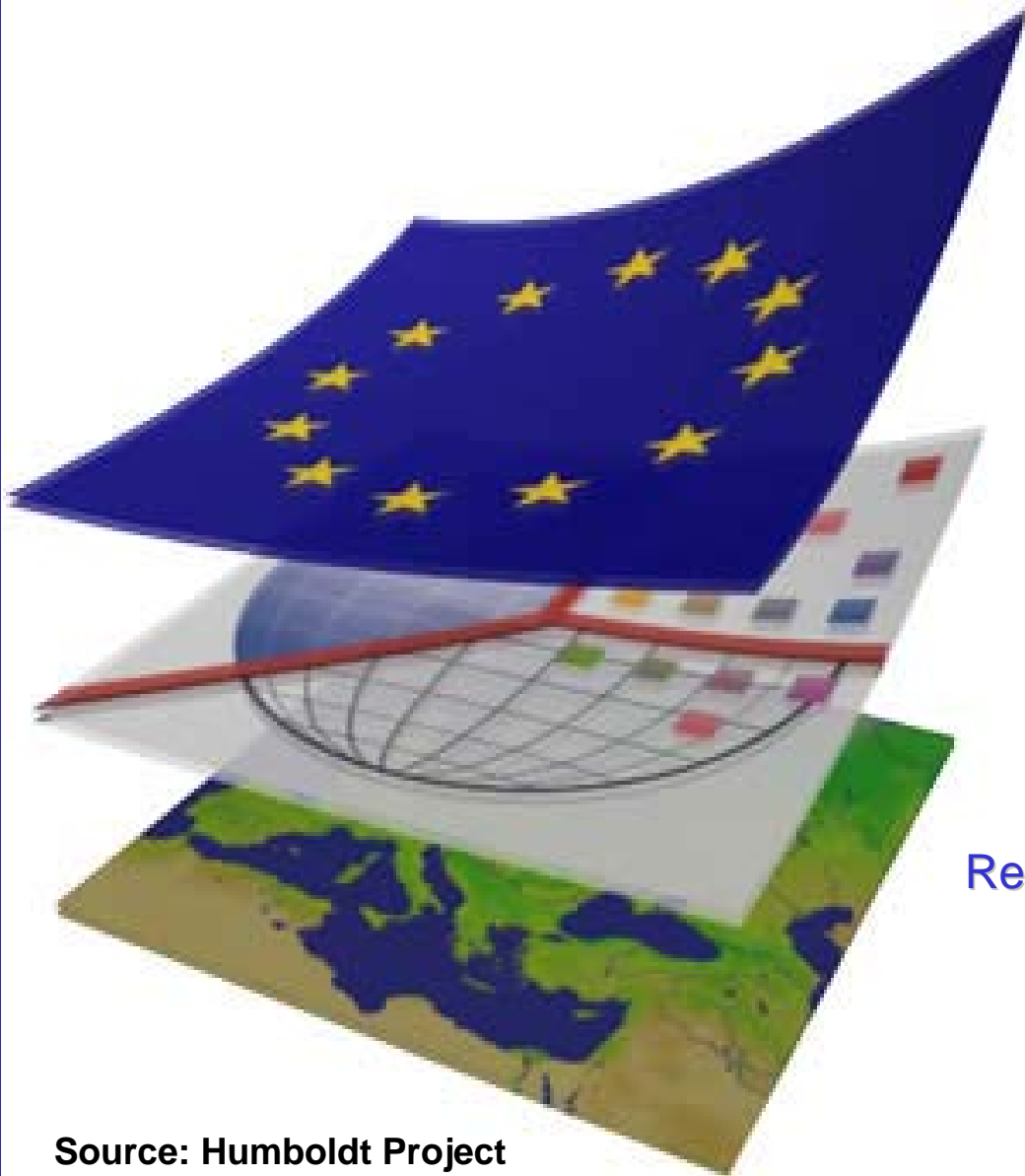
1. Statistical units
2. Buildings
3. Soil
4. Land use
5. Human health and safety
6. Utility and governmental services
7. Environmental monitoring facilities
8. Production and industrial facilities
9. Agricultural and aquaculture facilities
10. Population distribution – demography
11. Area management/restriction /regulation zones & reporting units
12. Natural risk zones
13. Atmospheric conditions
14. Meteorological geographical features
15. Oceanographic geographical features
16. Sea regions
17. Bio-geographical regions
18. Habitats and biotopes
19. Species distribution
20. Energy Resources
21. Mineral resources



Context Conclusions

- Spatial Data Infrastructures are a GLOBAL concern
- A conceptual shift in policy development
 - Towards integrated (spatial) assessments
 - Towards risk based environmental management
- Risk based environmental management requires:
 - For Risk Assessment (local to global)
 - Comprehensive, co-ordinated/common Monitoring programmes
 - Long-term Archiving and Access-to-data organised at the point of use
 - Consensus on models and mapping/portrayal of risks
- Recent Community Environmental policy developments are both a challenge and an opportunity for INSPIRE

The Community needs INSPIRE



INSPIRE Governance

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Source: Humboldt Project



Government versus Governance ?

“Today **government** is seen increasingly as one of several institutional players, like business or labour There is a need for a word to describe a **process** distinct from government itself - hence **governance**”

Canadian International Devt Agency

“Community-building is the soul work of **governance**. It is about creating support and connection amidst a local and global landscape which is increasingly insecure and fragmented.”

Vivian Hutchinson

Governance can be thought of as a process which brings together all the parties who have pieces of the jigsaw which, once made, will be the picture of that community’s future.

Governance does not equal Governing



INSPIRE Directive

Governance Structures

- The Commission (Article 22)
 - Shall be assisted by a Committee -> Comitology Procedure
 - Coordinating INSPIRE at Community level assisted by relevant organisations and, in particular, by the European Environment Agency
- The Member States
 - Are members of the Committee (Article 22)
 - Contact points to the Commission supported by a coordination structure, taking account of the distribution of powers and responsibilities within the Member State. (Article 19)
- Other Parties
 - European standardisation bodies (Article 20)
 - Representatives of Member States at national, regional and local level as well as other natural or legal persons, including users, producers, added value service providers or any coordinating body (Article 7)
- The European Parliament and Council



INSPIRE Directive Components

- I. Metadata
- II. Interoperability of spatial data sets and services
- III. Network services (discovery, view, download, transform, invoke)
- IV. Data and Service sharing (policy)
- V. Coordination and measures for Monitoring & Reporting

INSPIRE is a Framework Directive


Detailed technical provisions in Implementing Rules (IR)



Governance

The INSPIRE Regulatory Committee

Legal References

- Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (INSPIRE) and in particular Article 22
- 
- Council Decision 1999/468/EC of 28 June 1999 amended by Decision 2006/512/EC - laying down the procedures for the exercise of implementing powers conferred on the Commission, and in particular Articles 5 and 7, having regard of 8.



INSPIRE Directive

Article 22

1. The Commission shall be assisted by a Committee.
2. Where reference is made to this paragraph, Articles 5 and 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.

The period laid down in Article 5(6) of Decision 1999/468/EC shall be set at three months.

3. Where reference is made to this paragraph, Article 5a(1) to (4) and Article 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.



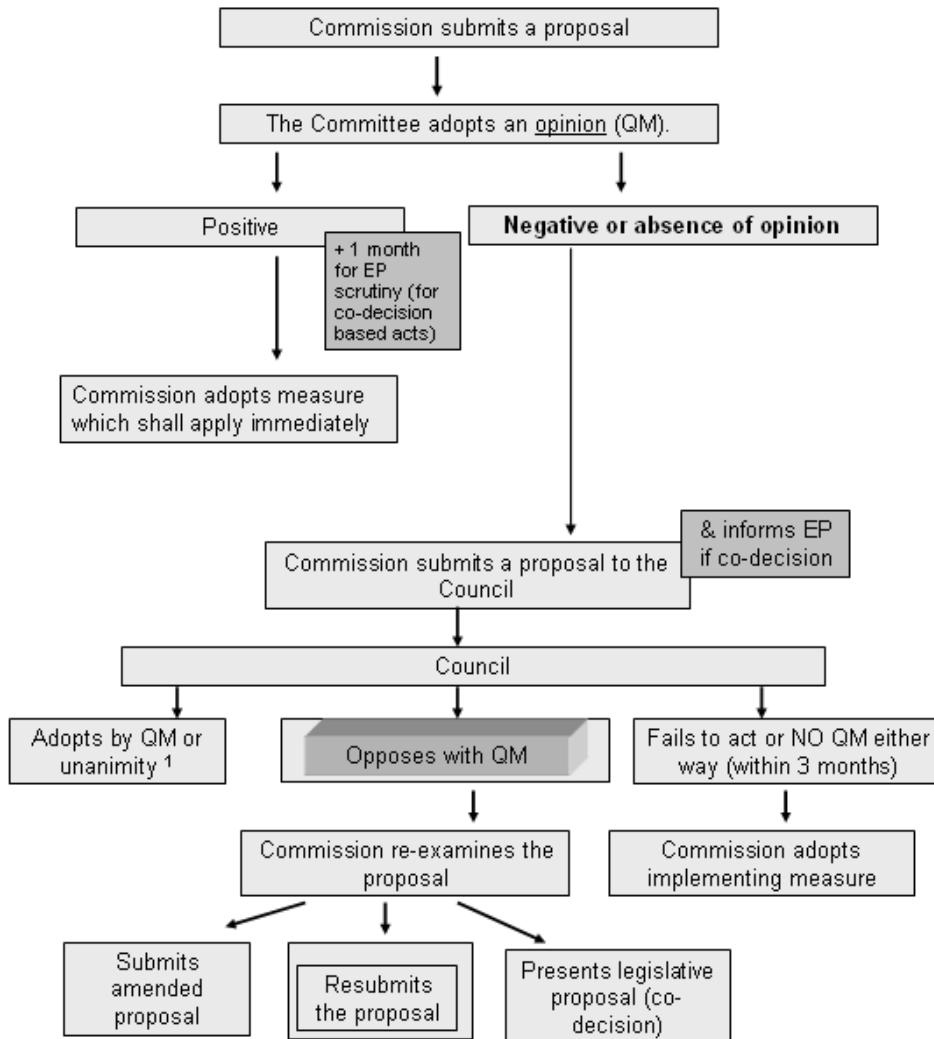
Council Decision 1999/468/EC of 28 June 1999
amended by Decision 2006/512/EC

Article 5 and 5a

- **Regulatory procedure**
 - The Commission shall be assisted by a regulatory committee composed of the representatives of the Member States and chaired by the representative of the Commission
- **Regulatory procedure with scrutiny (5a)**
 - The Commission shall be assisted by a Regulatory Procedure with Scrutiny Committee composed of the representatives of the Member States and chaired by the representative of the Commission
- **The INSPIRE Committee has this dual role**



Regulatory Procedure without Scrutiny

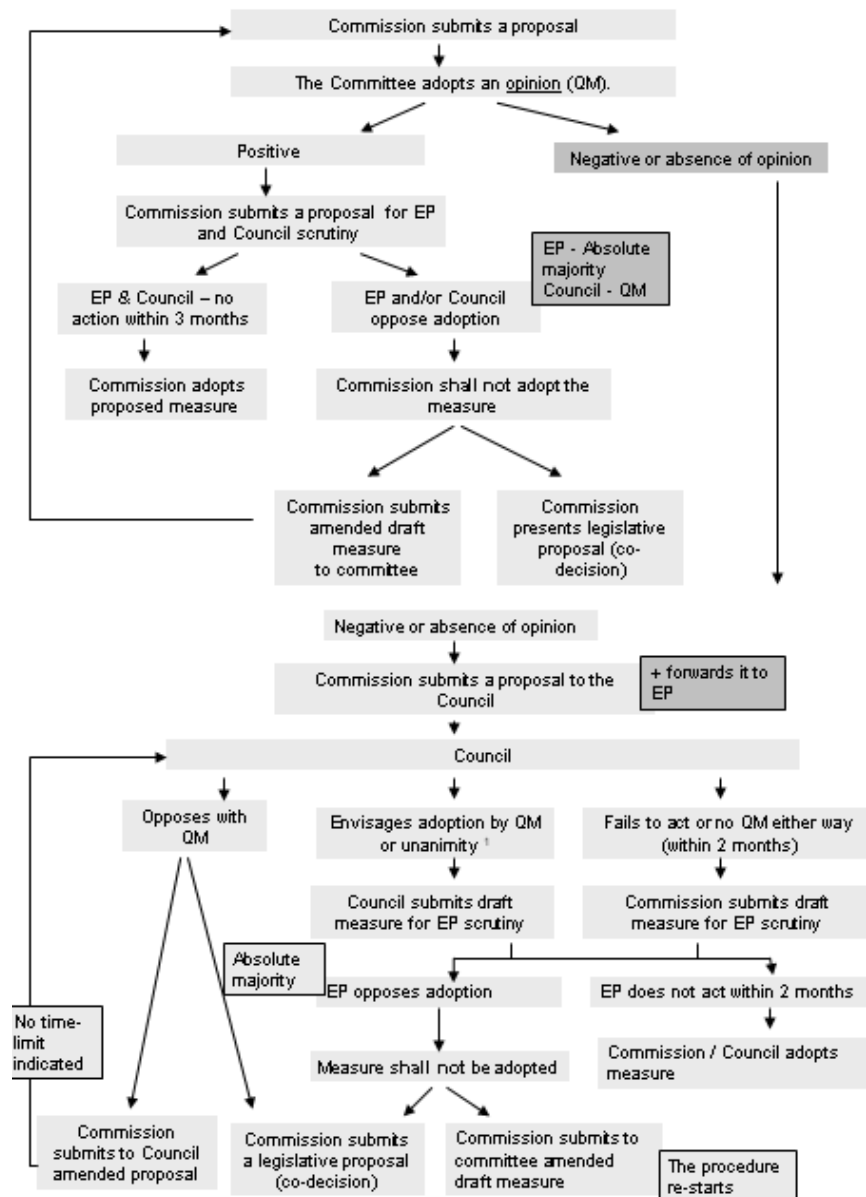


- INSPIRE Directive Implementing Rules
 - Metadata
 - Monitoring and Reporting

Fig. 3-1. Flowchart of the regulatory process without scrutiny (art. 5).



Regulatory Procedure with Scrutiny



- **INSPIRE Directive Implementing Rules**

- Network Services
- Interoperability of Spatial Data Sets and Services
- Harmonised condition for access to spatial data sets and services for institutions and bodies of the Community

Flowchart of the regulatory procedure with scrutiny



Qualified Majority (QM) Opinion in the Committee

Number of votes for each country in the Council	
Germany, France, Italy and the United Kingdom	29
Spain and Poland	27
Romania	14
Netherlands	13
Belgium, Czech Republic, Greece, Hungary and Portugal	12
Austria, Bulgaria and Sweden	10
Denmark, Ireland, Lithuania, Slovakia and Finland	7
Estonia, Cyprus, Latvia, Luxembourg and Slovenia	4
Malta	3
Total:	345

- **A minimum of 255 votes out of 345 (73.9 %) is required.**
- **A majority of member states must approve the decision**
- **Any member state may ask for confirmation that the votes cast in favour represent at least 62 % of the EU's total population**



The role of the European Parliament, EP

- The Commission is obliged to provide **information** to the EP about the proceedings of the (Comitology) Committees
- EP has a right of **scrutiny** over implementing rules of which the basic legislation falls under co-decision (251 EC-Treaty).



EP Right of Scrutiny

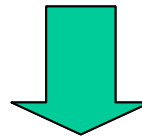
(Council Decision 1999/468/EC –Article8)

- After the receipt of the definite draft implementing rule;
- Before formal adoption by the Commission;
- One-month delay to indicate whether the Commission has exceeded its implementing power;
- If so, EP-resolution;
- The Commission re-examines the draft measure;
- Informs the EP and the Committee of the action it intends to take.



Implementing INSPIRE

- The implementation of INSPIRE needs to consider the broader context of existing initiatives which could contribute



- The INSPIRE implementation should interface with those partnerships and initiatives where relevant and establish synergy*

**e.g. GEOSS, GMES, GALILEO, GSDI,...*



concept of Spatial Data Interest Communities (SDIC)

- SDIC bundle the human expertise of **users**, **producers** and **transformers** of spatial information, technical competence, financial resources and policies. Many SDIC exist today, generally organised by region, thematic issue or sector (industry).

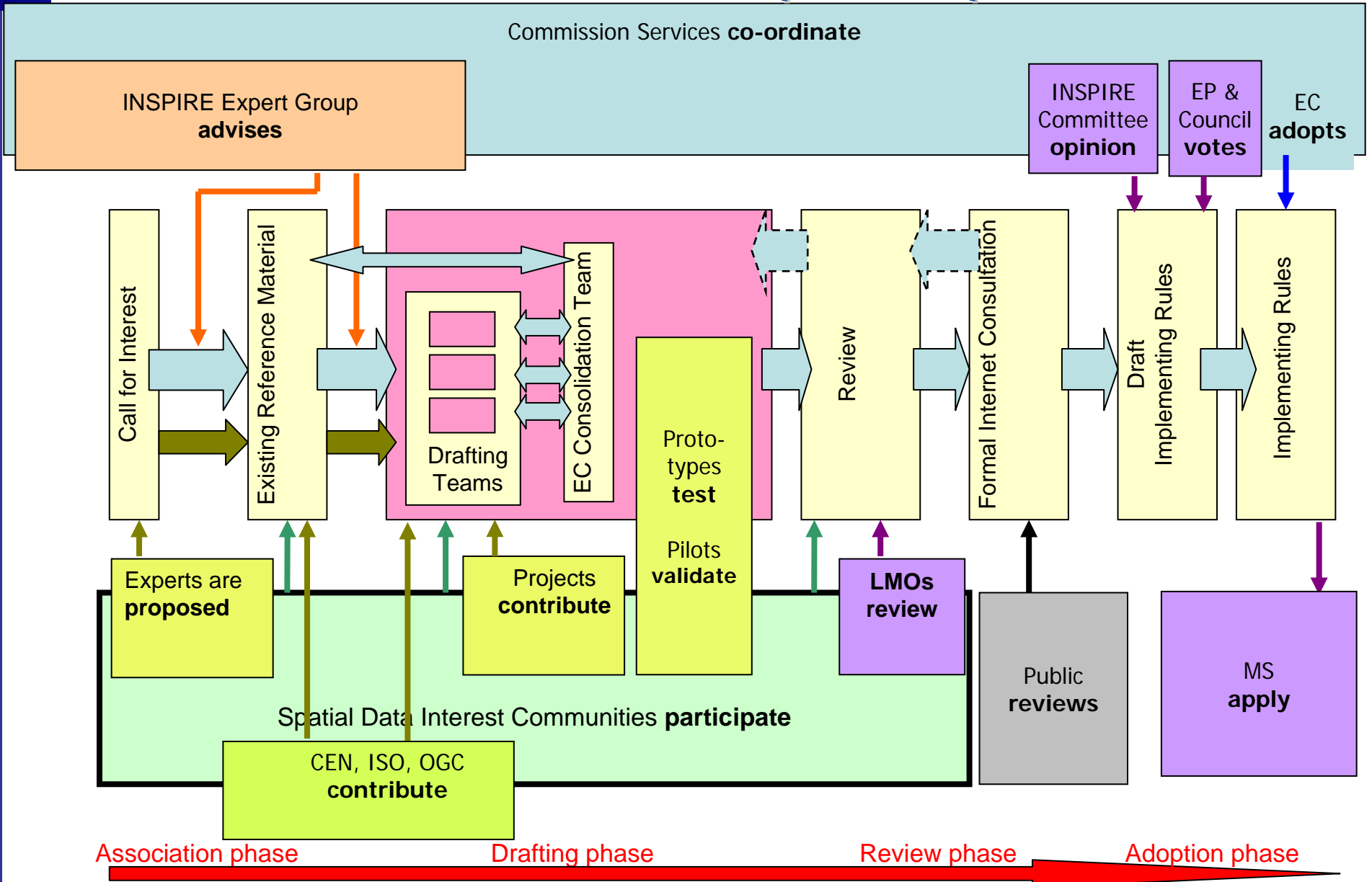


Implementing Rules Development Process Role of Spatial Data Interest Communities (SDIC)

- collect and describe user requirements,
- submit/develop reference materials
- allocate experts to the drafting teams,
- participate in the review process,
- implement pilot projects
 - to test/revise/develop the draft Implementing Rules,
- make cost/benefit analysis
 - to assess costs of the draft Implementing Rules,
- contribute to awareness raising and training



INSPIRE IR Development process



2005

2007



The role of Legally Mandated Organisations (LMO)

- To collaborate within the SDICs, or autonomously in providing technical specifications
- To help identify user needs
- To contribute to the analysis of the technical and operational feasibility of implementation of proposed draft Implementing Rules
- To provide feedback on the cost/benefit consequences of Implementing Rules at Member State level.



Strengthen Governance: The INSPIRE Forum

NEW

For(u)m follows Function

- 1) An INSPIRE Forum will complement the Community-Member States governance structures.
- 2) Brings together multiple societal stakeholders to share experiences and best practices while fostering co-ordination.
- 3) Foster constructive dialogue on issues related to the implementation of the INSPIRE (Implementing Rules development, impact assessments...) .
- 4) Strengthen co-ordination with other Community and global initiatives (GMES, UNSDI, GSDI, GEO/GEOSS, etc.).
- 5) Foster a co-ordinated programme of communication and awareness raising events, such as conferences and publications and as well technical workshops organised at national, regional, sector or Community levels



Strengthen Governance: The INSPIRE Forum

NEW

For(u)m follows Function

- 6) Serve as a platform to exchange views on Community and national regulatory initiatives related to the environment, relevant or impacting on the implementation of INSPIRE
- 7) Provide guidance for Community and Member State research, development and funding programmes in support of the implementation of INSPIRE at all levels
- 8) Facilitate collaboration between the public and private sector helping in innovating governmental services as well as supporting the creation of value added services based on the INSPIRE infrastructure (accordingly to the Lisbon agenda)

WE VALUE YOUR OPINION



Governance Conclusions

- Top-down: INSPIRE is a framework Directive with implementing rules to be adopted in the coming years
- Bottom-up: Highest involvement of key stakeholders through the “Spatial Data Interest Community” concept is needed for development, implementation and sustained operation
- Openness and transparency in drafting implementing measures a must
- Pilots and Projects fundamental to define and validate the implementing rules
- Links and interfaces with Community (GMES etc., GEO/GEOSS etc.) international initiatives essential for implementing a Global Spatial Data Infrastructure
- An INSPIRE Forum will facilitate building and sharing a common vision



<http://www.ec-gis.org/inspire/>



INSPIRE - Infrastructure for Spatial Information in Europe

- HOME
- WHY INSPIRE?
- INSPIRE PRINCIPLES
- WHAT'S NEW
- KEEP INFORMED / REGISTER
- METADATA SURVEY
- Registered SDIC/LMOs
- SDIC/LMO LOGIN and REGISTRATION
- INSPIRE PROPOSAL
- INTERNET CONSULTATION
- STATE of PLAY: Reports
- POSITION PAPERS
- EVENTS
- DOCUMENT ARCHIVE
- CONTACTS
- USEFUL LINKS

Thank You!

get to grips with
climate change



YOU CONTROL CLIMATE CHANGE.

TURN DOWN. SWITCH OFF. RECYCLE. WALK. CHANGE